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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,858

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Arun Ramaswamy

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EXAMINER

LEE, MICHAEL

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

06/08/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,858	Applicant(s) RAMASWAMY ET AL.	
	Examiner M. Lee	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7-9, 11, 12, 16, 18-20 and 23-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16, 18, 25, 27, 28 is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-9, 11, 12, 19, 20, 23, 24, 26, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 7-9, 11, 12, 19, 20, 23, 24, 26, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander (6,067,126).

Regarding claim 1, Alexander discloses a video editing system showing a video analysis module 202 (col. 5, lines 20-29), which meets the video component classifying step as claimed, and an audio analysis module 208 (col. 6, lines 1-15), which meets the audio component classifying step as claimed. It should be noted that the quantization region analyzing operation in Alexander clearly reads on the quality factor analyzing or the embedded data detecting step as claimed. Similarly, the audio analyzing and attributes identifying operations in the audio analysis module 208 of Alexander clearly meet the embedded audio data detecting step or the waveform energy analyzing step as claimed. However, Alexander does not disclose the determining step for determining whether the audio-video signal originated from a local device or is a broadcast signal based on at least one of the video classification or the audio classification as now claimed. Instead, Alexander discloses an audio file selection step (312) for

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augmenting the received audio signal based on the audio attribute information (AAI) and the video attribute information (VAI). However, using the selection step 312 to identify video sources instead of augmenting audio signals would have been obvious to one of ordinary skill in the art because the video sources can be identified based on the signal characteristics or attributes of each of the sources. For instance, signals transmitted from a remote location might have a lower signal-to-noise ratio or higher data error rate than a locally generated signal due to transmission losses. Also, audio signals generated locally usually has higher dynamic range than audio signals transmitted remotely because locally audio signals are not restricted by transmission bandwidth or data compression as required by the remotely generated audio signals. All these characteristics can be used to identify whether a video source is coming from a local source or a remote source. Since the attributes in Alexander is user modifiable, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Alexander so that the video editing system could be used to identify video sources. In fact, other than identifying video sources, Alexander can be used to perform many other functions simply by modifying the stored attributes.

Regarding claim 2, Alexander inherently includes a digitizer for digitizing analog video and audio signals into digital signals.

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Regarding claim 8, the motion visual attributes mentioned in col. 5, line 56 meets the measurements as recited in claim 8 because motion attributes normally include blur, blockiness (MPEG), or jitter.

Regarding claim 9, the video signal in Alexander, provided from a video playback device such as a VCR or DVD (note col. 3, lines 25-26), inherently includes a vertical blanking interval, which meets the vertical blanking interval analyzing step when the video analyzing step is performed in Alexander.

Regarding claim 11, the audio signals in Alexander are in digital code form when converted from analog.

Regarding claim 12, note col. 5, lines 37-42.

Regarding claim 19, Alexander meets the claimed active video analyzer, and the audio analyzer as set forth in rejection to claim 1 above. In addition, the step 312 and the speech determining step together meet the decision module as claimed.

Regarding claim 20, in addition of rejection to claim 2, Alexander inherently includes a frame buffer in order to store the digitized data.

Regarding claim 24, see rejection to claim 8.

Regarding claim 26, see rejection to claim 12.

Regarding claim 29, in addition of rejections above, the invention of Alexander is implemented on a computer readable medium (col. 10, lines 46-51).

Regarding claims 3, 7, 23 and 30, Alexander does not teach the use of a histogram to analyze the video data as claimed. The examiner takes Official Notice that using histogram to analyze video data is well known in the art because it enables

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an image to be recognized quickly and accurately while minimize the number of calculations required in a processor when performing the recognition operation.

Hence, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to include a histogram analyzing process into Alexander so that the attributes as mentioned in col. 5, lines 43-66 could be recognized quickly and accurately.

Allowable Subject Matter

3. Claims 16, 18, 25, 27, and 28 are allowed

Response to Arguments

4. Applicant's arguments filed 3/10/09 have been fully considered but they are not persuasive.

In considering applicant's argument that Alexander does not teach or suggest determining whether an audio-video signal originated from a local device or is a broadcast signal, the examiner disagrees. As set forth in the rejection above, the video editing system of Alexander can be used to identify video sources by modifying the stored attributes of the audio and video signals in view of different characteristics inherited in each of the video sources. As explained in the rejection, the remote signal can be very different from a local signal in term of signal-to-noise ratio and signal quality due to bandwidth restrictions. These differences can be used as source attributes to identify each of the video sources in Alexander. Since there is no modification other than changing attribute data in Alexander to achieve the source identifying function as claimed, it is considered an intended use of the invention except to modify the

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attributes. Since the attribute modification would have been obvious, the rejection based on Alexander stands.

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Lee whose telephone number 571-272-7349. The examiner can normally be reached on Monday through Thursday from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran, can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/M. Lee/
Primary Examiner
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